T 37	77.2 4	[O	155	min abana
L Number	Hits	Search Text	DB	Time stamp
1	0	\$fluoroadamantyl adj (methacrylate acrylate)	USPAT;	2003/09/09 10:03
.	8		US-PGPUB;	1
			EPO; JPO;	
	_	12.	DERWENT	, _ , ,
2	1	Sfluoro\$adamantyl adj (methacrylate	USPAT;	2003/09/09 10:11
		acrylate)	US-PGPUB;	
i			EPO; JPO;	
			DERWENT	
9	997	fluoro\$6yl adj (methacrylate acrylate)	USPAT;	2003/09/09 12:04
			US-PGPUB;	
			EPO; JPO;	
_		//	DERWENT	
8	22	(("2000684888") or ("2003017415") or	USPAT;	2003/09/09 11:17
		("2003013039") or ("6602646") or ("6596458")	US-PGPUB;	
		or ("2002150835") or ("2001044070") or	EPO; JPO;	
		("6579659")).PN.	DERWENT	
10	766	430/907.ccls. 430/905.ccls.	USPAT;	2003/09/09 12:04
			US-PGPUB;	
			EPO; JPO;	
	_	//20/0081- /00/005 - 1	DERWENT	
11	6	(430/907.ccls. 430/905.ccls.) and	USPAT;	2003/09/09 12:04
		(fluoro\$6yl adj (methacrylate acrylate))	US-PGPUB;	
			EPO; JPO;	
			DERWENT	
12	247	(\$10octafluoropentyl adj (methacrylate	USPAT;	2003/09/09 12:12
	_	acrylate)) (\$10fluor\$10adamantyl adj	US-PGPUB;	
		(methacrylate acrylate)) and (resist	EPO; JPO;	
	\	photoresist)	DERWENT	
13	6995	cyclossyl adj/methacrylate acrylate	USPAT;	2003/09/09 12:12
			MS PGPOB;	
			EPO; JPO;	
			DERWENT	
14	12	(fluorine fluoro fluorinated) same	USPAT;	2003/09/09 12:12
		((bicyclic polycyclic alicyclic) near	US-PGPUB;	
		(methacrylate acrylate))	EPO; JPO;	
			DERWENT	
15	905	fluoroalkyl near (methacrylate acrylate)	USPAT;	2003/09/09 12:12
. [US-PGPUB;	
			EPO; JPO;	
	5016	/////	DERWENT	
16	7916	((\$10octafluoropentyl adj (methacrylate	USPAT;	2003/09/09 12:12
		acrylate)) (\$10fluor\$10adamantyl adj	US-PGPUB;	
		(methacrylate acrylate)) and (resist	EPO; JPO;	
		photoresist)) (cyclo\$5yl adj (methacrylate	DERWENT	
		acrylate)) ((fluorine fluoro fluorinated)		
		same ((bicyclic polycyclic alicyclic) near		
		(methacrylate acrylate))) (fluoroalkyl		
1.	==	near (methacrylate acrylate))		
17	72	(((\$10octafluoropentyl adj (methacrylate	USPAT;	2003/09/09 12:12
1		acrylate)) (\$10fluor\$10adamantyl adj	US-PGPUB;	
1		(methacrylate acrylate)) and (resist	EPO; JPO;	•
]		photoresist)) (cyclo\$5yl adj (methacrylate	DERWENT	•
i		acrylate)) ((fluorine fluoro fluorinated)		
. 1		same ((bicyclic polycyclic alicyclic) near		
·		(methacrylate acrylate)) (fluoroalkyl		
· [near (methacrylate acrylate))) and		
		(430/907.ccls. 430/905.ccls.)	110000	0000/00/00 == ==
18	66	((((\$10octafluoropentyl adj (methacrylate	USPAT;	2003/09/09 12:24
		acrylate)) (\$10fluor\$10adamantyl adj	US-PGPUB;	
		(methacrylate acrylate)) and (resist	EPO; JPO;	
1		photoresist)) (cyclo\$5yl adj (methacrylate	DERWENT	
1		acrylate)) ((fluorine fluoro fluorinated)		
l		same ((bicyclic polycyclic alicyclic) near		
ŀ		(methacrylate acrylate))) (fluoroalkyl		
		near (methacrylate acrylate))) and		
ŀ		(430/907.ccls. 430/905.ccls.)) not		
		((430/907.ccls. 430/905.ccls.) and (fluoro\$6yl adj (methacrylate acrylate)))		

	_
1	$\overline{}$
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- 1	
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<u> </u>				
19	0	2-fluoroadamantyl adj acrylate	USPAT; US-PGPUB; EPO; JPO;	2003/09/09 12:24
			DERWENT	
20	2	2-fluoroadamantyl	USPAT;	2003/09/09 12:25
		·	US-PGPUB;	
			EPO; JPO;	
		6763	DERWENT	0000/00/00 10 51
21	6	\$7fluoroadamantyl	USPAT; US-PGPUB;	2003/09/09 12:51
			EPO; JPO;	
			DERWENT	
22	4	\$7fluoronorbornyl	USPAT;	2003/09/09 12:52
			US-PGPUB;	•
			EPO; JPO;	
23	4	\$10fluoronorbornyl	DERWENT USPAT;	2003/09/09 12:53
23	1	\$1011tto10h01b01hy1	US-PGPUB;	2003/09/09 12:53
			EPO; JPO;	
1 _			DERWENT	
24	3	\$10fluoroisobornyl	USPAT;	2003/09/09 12:54
			US-PGPUB;	
	1		EPO; JPO; DERWENT	
25	2	\$10fluoroisobornyl not \$10fluoronorbornyl	USPAT;	2003/09/09 12:54
		,	US-PGPUB;	=====================================
			EPO; JPO;	
	`	10005 4 317	DERWENT	
97	0.	au-13035-\$.did.	USPAT;	2003/09/09 13:46
			US-PGPUB; EPO; JPO;	
	1		DERWENT	
98	0	au-88013035-\$.did.	USPAT;	2003/09/09 13:46
			US-PGPUB;	
			EPO; JPO;	•
1_	1.	("20030008231").PN.	DERWENT	2002/00/00 10:02
_		(20030008231).PN.	USPAT; US-PGPUB;	2003/09/09 10:02
			EPO; JPO;	
			DERWENT	
-	75	fluorin\$8 near alicyclic	USPAT;	2003/09/08 10:25
		·	US-PGPUB; EPO; JPO;	
		•	DERWENT	
-	246	\$10octafluoropentyl adj (methacrylate	USPAT;	2003/09/08 10:27
		acrylate)	US-PGPUB;	, ,
			EPO; JPO;	
_	247	(\$10octafluoropentyl adj (methacrylate	DERWENT	2002/00/00 12:11
	44/	(\$100ctalluoropenty1 adj (methacrylate acrylate)) (\$10fluor\$10adamanty1 adj	USPAT; US-PGPUB;	2003/09/09 12:11
		(methacrylate acrylate)) and (resist	EPO; JPO;	
		photoresist)	DERWENT	
-	1	[USPAT;	2003/09/08 11:15
l		acrylate)	US-PGPUB;	
	1.		EPO; JPO; DERWENT	
-	4397	(fluorine fluoro fluorinated) near5	USPAT;	2003/09/08 16:21
		(methacrylate acrylate)	US-PGPUB;	,,
			EPO; JPO;	
		//Eluquing Eluque 53 - 1 - 1 - 2	DERWENT	0000 (05 (55
-	546	((fluorine fluoro fluorinated) near5 (methacrylate acrylate)) and (resist	USPAT;	2003/09/08 10:36
		(methacrylate acrylate) and (resist photoresist)	US-PGPUB; EPO; JPO;	
		F	DERWENT	
-	546	· · · · · · · · · · · · · · · · · ·	USPAT;	2003/09/08 14:06
		(methacrylate acrylate)) and (resist	US-PGPUB;	
		photoresist)) not (fluorin\$8 near alicyclic	EPO; JPO;	
1_	419) adamanty adi (methacrylato completo)	DERWENT	2002/00/00 33 33
	419	adamantyl adj (methacrylate acrylate)	USPAT; US-PGPUB;	2003/09/08 11:30
			EPO; JPO;	
			DERWENT	

- 1				
-	0	(fluorine fluoro fluorinated) near	USPAT;	2003/09/08 11:16
		(adamantyl adj (methacrylate acrylate))	US-PGPUB; EPO; JPO;	
-	6990	cyclo\$5yl adj (methacrylate acrylate)	DERWENT USPAT; US-PGPUB;	2003/09/09 12:12
_	0	2002363222.URPN.	EPO; JPO; DERWENT USPAT	2003/09/08 13:35
_	1		.USPAT;	2003/09/08 13:35
		200101 01/013/1/2141/	US-PGPUB; EPO; JPO; DERWENT	2003/03/00 11:03
-	904	fluoroalkyl near (methacrylate acrylate)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/09 12:12
-	868	not ((((fluorine fluoro fluorinated) near5 (methacrylate acrylate)) and (resist photoresist)) not (fluorin\$8 near alicyclic	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/08 14:06
-	5854256	acrylate)) not ((((fluorine fluoro fluorinated) near5 (methacrylate acrylate)) and (resist photoresist)) not (fluorin\$8	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/08 14:07
-	58	near alicyclic))) and (430/\$.ccls.) ((fluoroalkyl near (methacrylate acrylate)) not (((fluorine fluoro fluorinated) near5 (methacrylate acrylate)) and (resist photoresist)) not (fluorin\$8 near alicyclic	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/08 14:08
-	12))) and (430/\$.ccls.)	USPAT; US-PGPUB; EPO; JPO;	2003/09/08 14:19
	44	\$fluorocyclo\$6yl adj (methacrylate acrylate)	DERWENT USPAT; US-PGPUB; EPO; JPO;	2003/09/08 15:27
-	. 44	(\$fluorocyclo\$6yl adj (methacrylate acrylate)) not (fluorocycloalkyl near (methacrylate acrylate))	DERWENT USPAT; US-PGPUB; EPO; JPO;	2003/09/08 16:20
-	302	alicyclic near (methacrylate acrylate)	DERWENT USPAT; US-PGPUB; EPO; JPO;	2003/09/08 16:20
-	366	(bicyclic polycyclic alicyclic) near (methacrylate acrylate)	DERWENT USPAT; US-PGPUB; EPO; JPO;	2003/09/08 16:20
-	12	(fluorine fluoro fluorinated) same ((bicyclic polycyclic alicyclic) near (methacrylate acrylate))	DERWENT USPAT; US-PGPUB; EPO; JPO;	2003/09/09 12:12
_	17	(\$10fluorine \$10fluoro \$10fluorinated nonafluoro) same ((bicyclic polycyclic alicyclic) near (methacrylate acrylate))	DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/08 16:25

ENTER SCREEN EXPRESSION OR (END):end

Uploading C:\Program Files\Stnexp\Queries\10084828.str

STRUCTURE UPLOADED

=> que L1

QUE L1

=> d

L2 HAS NO ANSWERS

L1

STR

.C1 G1 CH₂ 0

G1 H, F, Ak, CF3

STD Search Not Remove

Structure attributes must be viewed using STN Express query preparation. QUE ABB=ON PLU=ON L1

=> s 12 sss sam SAMPLE SEARCH INITIATED 13:53:36 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 233 TO ITERATE

100.0% PROCESSED

0 ANSWERS 233 ITERATIONS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** **COMPLETE**

BATCH PROJECTED ITERATIONS: 3745 TO

PROJECTED ANSWERS: 0 TO

L3 0 SEA SSS SAM L1

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END): end

=> screen 970 AND 2067

SCREEN CREATED 1.4

Uploading C:\Program Files\Stnexp\Queries\10084828-2.str

L5 STRUCTURE UPLOADED

=> que L5 AND L4

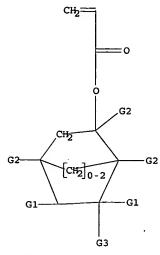
L6 QUE L5 AND L4

=> d

L6 HAS NO ANSWERS

1.4 SCR 970 AND 2067

L5 STR



G1 H, F G2 H, F, CF3, Ak G3 F, CF2, CF3

Structure attributes must be viewed using STN Express query preparation. QUE ABB=ON PLU=ON L5 AND L4 L6

=> s 16 sss sam SAMPLE SEARCH INITIATED 13:54:27 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -28 TO ITERATE

100.0% PROCESSED 28 ITERATIONS SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

COMPLETE BATCH

PROJECTED ITERATIONS: 243 TO

PROJECTED ANSWERS: 0 TO 0

L7 O SEA SSS SAM L5 AND L4

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

Uploading C:\Program Files\Stnexp\Queries\10084828-3.str

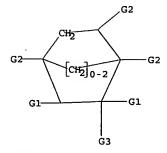
L8 STRUCTURE UPLOADED

=> que L8

L9 QUE L8

=> d

L9 HAS NO ANSWERS



G1 H, F

G2 H, F, CF3, Ak

G3 F, CF2, CF3

Structure attributes must be viewed using STN Express query preparation. L9 QUE ABB=ON PLU=ON L8

=> s 19 sss sam

SAMPLE SEARCH INITIATED 13:55:02 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 14330 TO ITERATE

7.0% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS:

279436 TO 293764

PROJECTED ANSWERS:

59 TO 513

L10

1 SEA SSS SAM L8

=> d

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 195258-93-6 REGISTRY

CN Phosphonic acid, (bicyclo[2.2.1]hept-2-yldifluoromethyl)-, diethyl ester,

exo- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C12 H21 F2 O3 P

SR CA

LC STN Files: CA, CAPLUS

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1937 TO DATE)

1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

=> FIL HCAPLUS, CAPLUS, USPATFULL

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

3.28 3.49

FILE 'HCAPLUS' ENTERED AT 13:55:28 ON 08 SEP 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 13:55:28 ON 08 SEP 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

```
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COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'USPATFULL' ENTERED AT 13:55:28 ON 08 SEP 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)
```

=> d his

(FILE 'HOME' ENTERED AT 13:52:58 ON 08 SEP 2003)

FILE 'REGISTRY' ENTERED AT 13:53:06 ON 08 SEP 2003 $L1 \cdot$ STRUCTURE UPLOADED

L2 QUE L1 0 S L2 SSS SAM L3 SCREEN 970 AND 2067 1.4 L5 STRUCTURE UPLOADED L6 QUE L5 AND L4 0 S L6 SSS SAM L7 STRUCTURE UPLOADED L8 L9

QUE L8 1 S L9 SSS SAM

FILE 'HCAPLUS, CAPLUS, USPATFULL' ENTERED AT 13:55:28 ON 08 SEP 2003

=> s 13 or 17 or 110 2 L3 OR L7 OR L10 L11

=> d 111 1-2 ibib hitstr

AUTHOR (S):

L11 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:566255 HCAPLUS

DOCUMENT NUMBER: 127:234358

Conjugate addition reactions of a TITLE:

(diethoxyphosphinoyl)difluoromethyl anion equivalent

to acyclic and cyclic vinyl sulfones Blades, K.; Lapotre, D.; Percy, J. M.

CORPORATE SOURCE: Sch. Chemistry, Univ. Birmingham, Edgbaston,

Birmingham, B15 2TT, UK

SOURCE: Tetrahedron Letters (1997), 38(33), 5895-5898

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

195258-93-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN 195258-93-6 HCAPLUS

Phosphonic acid, (bicyclo[2.2.1]hept-2-yldifluoromethyl)-, diethyl ester, CN

exo- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L11 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:566255 CAPLUS

DOCUMENT NUMBER: 127:234358

Conjugate addition reactions of a TITLE:

(diethoxyphosphinoyl)difluoromethyl anion equivalent

to acyclic and cyclic vinyl sulfones

AUTHOR (S): Blades, K.; Lapotre, D.; Percy, J. M.

Sch. Chemistry, Univ. Birmingham, Edgbaston, Birmingham, B15 2TT, UK CORPORATE SOURCE:

SOURCE: Tetrahedron Letters (1997), 38(33), 5895-5898

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

195258-93-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

195258-93-6 CAPLUS

CN Phosphonic acid, (bicyclo[2.2.1]hept-2-yldifluoromethyl)-, diethyl ester, exo- (9CI) (CA INDEX NAME)

Relative stereochemistry.

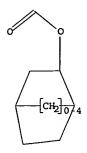
=> que L4

QUE L4 L5

=> d

L5 HAS NO ANSWERS

L4



Structure attributes must be viewed using STN Express query preparation. L5 $${\tt QUE}$$ ABB=ON PLU=ON L4

=> s 15 sss sam

SAMPLE SEARCH INITIATED 14:03:26 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 17471 TO ITERATE

5.7% PROCESSED

1000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS:

341515 TO 357325

PROJECTED ANSWERS:

8131 TO 10737

L6

27 SEA SSS SAM L4

=> d

ANSWER 1 OF 27 REGISTRY COPYRIGHT 2003 ACS on STN L6

565462-43-3 REGISTRY RN

Bicyclo[2.2.1]heptane-2-carboxylic acid, 2-(benzoylamino)-3-CN

[(ethoxycarbonyl)oxy]-, ethyl ester, (1R, 2R, 3S, 4S)-rel- (9CI) (CA INDEX

NAME)

FS STEREOSEARCH

MF C20 H25 N O6

SR CA

STN Files: CA, CAPLUS

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1937 TO DATE)

1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

=> FIL HCAPLUS, CAPLUS, USPATFULL

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

4.96

5.17

27 ANSWERS

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 14:03:59 ON 08 SEP 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS) FILE 'CAPLUS' ENTERED AT 14:03:59 ON 08 SEP 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS) FILE 'USPATFULL' ENTERED AT 14:03:59 ON 08 SEP 2003 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS) => s 16 L7 139 L6 => s 17 and (photoresist or resist) L8 26 L7 AND (PHOTORESIST OR RESIST) => s 18 and (fluor?) 7 L8 AND (FLUOR?) => duplicates remove 19 DUPLICATE PREFERENCE IS 'HCAPLUS, CAPLUS, USPATFULL' KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n PROCESSING COMPLETED FOR L9 6 DUPLICATE REMOVE L9 (1 DUPLICATE REMOVED) => d 110 1-6 ibib hitstr L10 ANSWER 1 OF 6 USPATFULL on STN ACCESSION NUMBER: 2003:126971 USPATFULL TITLE: Polymer, resist composition and patterning process INVENTOR(S): Nishi, Tsunehiro, Niigata-ken, JAPAN Hasegawa, Koji, Niigata-ken, JAPAN Kinsho, Takeshi, Niigata-ken, JAPAN NUMBER KIND DATE PATENT INFORMATION: US 2003087183 20030508 A1 APPLICATION INFO.: US 2002-230341 A1 20020829 (10) NUMBER DATE PRIORITY INFORMATION: JP 2001-262833 20010831 DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747 NUMBER OF CLAIMS: 4 EXEMPLARY CLAIM: 1 1550 LINE COUNT: CAS INDEXING IS AVAILABLE FOR THIS PATENT. IT 521950-67-4P (polymer and resist compn. for deep-UV and electron beam patterning process) RN 521950-67-4 USPATFULL CN 3,5-Methano-2H-cyclopenta[b] furan-7-carboxylic acid, hexahydro-2-oxo-6-[(1oxo-2-propenyl)oxy]-, methyl ester, polymer with 2,5-furandione, 2-methyltricyclo[3.3.1.13,7]dec-2-yl 2-propenoate and spiro[bicyclo[2.2.1]hept-5-ene-2,3'(2'H)-furan]-5'(4'H)-one (9CI) (CA INDEX NAME) CM 1 CRN 449759-66-4

$$H_2C = CH - C - O$$
 $C - OMe$

CMF C13 H14 O6

CM

CRN 282542-79-4 CMF C10 H12 O2



CM

CRN 249562-06-9 CMF C14 H20 O2

CM

CRN 108-31-6 CMF C4 H2 O3

L10 ANSWER 2 OF 6 USPATFULL on STN

ACCESSION NUMBER:

2003:10538 USPATFULL

TITLE:

Novel (meth) acrylates having lactone structure,

polymers, photoresist compositions and

patterning process

INVENTOR(S):

Kinsho, Takeshi, Niigata-ken, JAPAN

Hasegawa, Koji, Niigata-ken, JAPAN

PATENT ASSIGNEE(S):

Watanabe, Takeru, Niigata-ken, JAPAN Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.

corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 2003008232 A1 20030109 APPLICATION INFO.: US 2002-167444 A1 20020613 (10)

NUMBER

DATE

PRIORITY INFORMATION: DOCUMENT TYPE:

JP 2001-179614 20010614

Utility

APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON

BLVD., SUITE 1400, ARLINGTON, VA, 22201

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

8 1

LINE COUNT: 729 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 479072-45-2P

(lactone-contg. acrylate-based excimer laser-sensitive chem. amplified pos. photoresists with good transparency)

RN 479072-45-2 USPATFULL

2-Propenoic acid, dihydro-2'-oxospiro[bicyclo[2.2.1]heptane-2,3'(2'H)-furan]-6-yl ester (9CI) (CA INDEX NAME) CN

```
H<sub>2</sub>C=CH-C-O
```

CCI

IDS

```
L10 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1
ACCESSION NUMBER:
                         2002:868986 HCAPLUS
DOCUMENT NUMBER:
                         137:370796
TITLE:
                         Radiation-sensitive polysiloxane resin composition
INVENTOR (S):
                         Iwasawa, Haruo; Hayashi, Akihiro; Shimokawa, Tsutomu;
                         Yamamoto, Masafumi
                         JSR Co., Ltd., Japan PCT Int. Appl., 155 pp.
PATENT ASSIGNEE(S):
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO. DATE
     WO 2002090423
                            20021114
                                            WO 2002-JP4333
                                                             20020430
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
             US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     JP 2003020335
                                           JP 2002-48643
                      A2
                            20030124
                                                             20020225
PRIORITY APPLN. INFO.:
                                         JP 2001-133795
                                                          Α
                                                             20010501
                                         JP 2002-48643
                                                          Α
                                                             20020225
OTHER SOURCE(S):
                         MARPAT 137:370796
    474559-57-4P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); PREP (Preparation); USES (Uses)
        (radiation-sensitive polysiloxane resin compn.)
     474559-57-4 HCAPLUS
CN
     Bicyclo[2.2.1]heptane-2-carboxylic acid, 5(or 6)-(triethoxysily1)-2-
     (trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 5(or
     6) - (triethoxysilyl) - .alpha., .alpha.-bis(trifluoromethyl)bicyclo[2.2.1]hept
     ane-2-ethanol and 5(or 6)-(triethoxysilyl)-2-(trifluoromethyl)bicyclo[2.2.
     1]hept-2-yl acetate (9CI) (CA INDEX NAME)
     CM .
     CRN
          474559-08-5
         C16 H27 F3 O5 Si
     CMF
     CCI
         IDS
      OAc
Eto-Si-OEt
     ÖEt
     CM
         474559-06-3
     CMF
         C19 H33 F3 O5 Si
```

CM 3

CRN 365546-74-3 CMF C17 H28 F6 O4 Si CCI IDS

REFERENCE COUNT:

25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 6 USPATFULL on STN

ACCESSION NUMBER:

2002:119480 USPATFULL

TITLE: Polymer, resist composition and patterning

process

INVENTOR(S): Nishi, Tsunehiro, Nakakubiki-gun, JAPAN

Nakashima, Mutsuo, Nakakubiki-gun, JAPAN Tachibana, Seiichiro, Nakakubiki-gun, JAPAN Kinsho, Takeshi, Nakakubiki-gun, JAPAN Hasegawa, Koji, Nakakubiki-gun, JAPAN Watanabe, Takeru, Nakakubiki-gun, JAPAN

Hatakeyama, Jun, Nakakubiki-gun, JAPAN

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.

corporation)

NUMBER KIND DATE US 2002061463 20020523 A1 US 2001-951523 A1 20010914

NUMBER DATE 20000914

JP 2000-279164 PRIORITY INFORMATION: DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON LEGAL REPRESENTATIVE:

BLVD., SUITE 1400, ARLINGTON, VA, 22201

NUMBER OF CLAIMS: 7 EXEMPLARY CLAIM: LINE COUNT: 1766

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 409093-65-8P

PATENT INFORMATION:

APPLICATION INFO.:

(polymers with cyclopentane rings in or adjacent to the chains for

resists patternable by UV or electron beams)

409093-65-8 USPATFULL

2-Propenoic acid, 2-methyl-, 2-ethylbicyclo[2.2.1]hept-2-yl ester, polymer CN with 5-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)dihydro-2(3H)-furanone and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CM

CRN 330595-98-7 CMF C13 H20 O2

CM

108-31-6 CRN CMF C4 H2 O3

INVENTOR(S):

L10 ANSWER 5 OF 6 USPATFULL on STN

ACCESSION NUMBER:

2001:147641 USPATFULL

TITLE:

Ester compounds, polymers, resist compositions and patterning process Kinsho, Takeshi, Nakakubiki-gun, Japan

Nishi, Tsunehiro, Nakakubiki-gun, Japan Kurihara, Hideshi, Usui-gun, Japan Nakashima, Mutsuo, Nakakubiki-gun, Japan Hasegawa, Koji, Nakakubiki-gun, Japan Watanabe, Takeru, Nakakubiki-gun, Japan

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Co., Ltd., Tokyo, Japan (non-U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.:

B1 20010904 US 6284429 US 2000-512108 20000224 (9)

NUMBER

DATE

PRIORITY INFORMATION:

JP 1999-47406 19990225 JP 1999-174945 19990622

DOCUMENT TYPE:

Utility

FILE SEGMENT:

GRANTED

PRIMARY EXAMINER:

Ashton, Rosemary E.

LEGAL REPRESENTATIVE:

Millen, White, Zelano & Branigan, P.C 19

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1

LINE COUNT:

2016

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 290808-37-6P

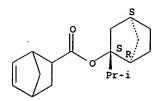
(novel ester compds., polymers, resist compns. and patterning process)

290808-37-6 USPATFULL

CN

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, (1R,2S,4S)-2-(1-methylethyl)bicyclo[2.2.1]hept-2-yl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L10 ANSWER 6 OF 6 USPATFULL on STN

ACCESSION NUMBER:

2001:142042 USPATFULL

TITLE:

Lactone-containing compounds, polymers, resist

compositions, and patterning method Hasegawa, Koji, Nakakubiki-gun, Japan INVENTOR(S): Nishi, Tsunehiro, Nakakubiki-gun, Japan

Kinsho, Takeshi, Nakakubiki-gun, Japan Hatakeyama, Jun, Nakakubiki-gun, Japan Watanabe, Osamu, Nakakubiki-gun, Japan Shin-Etsu Chemical Co., Ltd., Tokyo, Japan (non-U.S.

PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE US 6280898 В1 20010828

PATENT INFORMATION: APPLICATION INFO.:

US 1999-404763

19990924 (9)

NUMBER DATE

PRIORITY INFORMATION:

JP 1998-270373 19980925

DOCUMENT TYPE:

Utility GRANTED

FILE SEGMENT: PRIMARY EXAMINER:

Baxter, Janet Ashton, Rosemary

ASSISTANT EXAMINER: LEGAL REPRESENTATIVE:

Millen, White, Zelano & Branigan, P.C. 21

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1

LINE COUNT:

1654 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 274248-37-2P

(synthesis of lactone-contg. polymers for resist compns. and method of forming resist pattern using the compn.)

RN 274248-37-2 USPATFULL

CN

2-Propenoic acid, 2-methyl-, octahydro-7-(1-methylethyl)-2-oxo-3,6methanobenzofuran-7-yl ester, polymer with tetrahydro-2H-pyran-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 274248-01-0 C16 H22 O4 CMF

CM

52858-59-0 CRN C9 H14 O3 CMF

=> d his (FILE 'HOME' ENTERED AT 10:15:29 ON 09 SEP 2003) FILE 'REGISTRY' ENTERED AT 10:15:44 ON 09 SEP 2003 SCREEN 963 AND 970 AND 1006 AND 2067 L1 STRUCTURE UPLOADED L2 L3 QUE L2 AND L1 15 S L3 SSS SAM L4 FILE 'CAPLUS, HCAPLUS, USPATFULL' ENTERED AT 10:17:00 ON 09 SEP 2003 L569 S L4 L6 9 S L5 AND (FLUORINE OR FLUORINATED OR FLUORO) L7 8 DUPLICATE REMOVE L6 (1 DUPLICATE REMOVED) => d 17 1-8 ibib L7 ANSWER 1 OF 8 USPATFULL on STN ACCESSION NUMBER: 2003:106118 USPATFULL TITLE: Positive-working resist composition INVENTOR(S): Sato, Kenichiro, Shizuoka, JAPAN Kodama, Kunihiko, Shizuoka, JAPAN Aoai, Toshiaki, Shizuoka, JAPAN PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation) KIND DATE NUMBER US 2003073029 A1 20030417 PATENT INFORMATION: A1 20011220 (10) APPLICATION INFO.: US 2001-22363 RELATED APPLN. INFO.: Division of Ser. No. US 2000-684888, filed on 6 Oct 2000, PENDING NUMBER DATE ----- ---PRIORITY INFORMATION: JP 1999-285761 19991006 JP 2000-80519 20000322 DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 Pennsylvania Avenue, NW, Washington, DC, 20037-3213 NUMBER OF CLAIMS: 10 EXEMPLARY CLAIM: LINE COUNT: 2718 CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 2 OF 8 USPATFULL on STN ACCESSION NUMBER: 2003:23576 USPATFULL TITLE: Positive photosensitive composition INVENTOR(S): Kodama, Kunihiko, Shizuoka, JAPAN Sato, Kenichiro, Shizuoka, JAPAN PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation) NUMBER KIND DATE -----US 2003017415 A1 20030123 US 2002-79414 A1 20020222 (10) PATENT INFORMATION: APPLICATION INFO.: US 2002-79414 NUMBER DATE PRIORITY INFORMATION: JP 2001-48602 20010223 JP 2001-48783 20010223 JP 2001-48784 20010223 JP 2001-48880 20010223 JP 2001-157366 20010525 JP 2001-157367 20010525 DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC, 20037 NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM: 1 LINE COUNT: 3838 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 . ANSWER 3 OF 8 USPATFULL on STN

ACCESSION NUMBER: 2003:17287 USPATFULL

TITLE:

Resist composition and patterning process Kobayashi, Tomohiro, Niigata-ken, JAPAN INVENTOR(S): Nishi, Tsunehiro, Niigata-ken, JAPAN

Watanabe, Satoshi, Niigata-ken, JAPAN Kinsho, Takeshi, Niigata-ken, JAPAN Nagura, Shigehiro, Niigata-ken, JAPAN

Ishihara, Toshinobu, Niigata-ken, JAPAN

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, UNITED STATES, 100-0004 (non-U.S. corporation)

> NUMBER KIND DATE

PATENT INFORMATION: US 2003013039 A1 20030116 APPLICATION INFO.: US 2002-170345 20020614 (10) A1

> NUMBER DATE

PRIORITY INFORMATION: JP 2001-181079 20010615

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON

BLVD., SUITE 1400, ARLINGTON, VA, 22201

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

LINE COUNT: 1854

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 4 OF 8 USPATFULL on STN

ACCESSION NUMBER: 2003:209927 USPATFULL

Positive-working resist composition TITLE: INVENTOR(S): Sato, Kenichiro, Shizuoka, JAPAN Kodama, Kunihiko, Shizuoka, JAPAN Aoai, Toshiaki, Shizuoka, JAPAN

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Kanagawa, JAPAN (non-U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 6602646 B1 20030805 APPLICATION INFO.:

US 2000-684888 20001006 (9) NUMBER DATE

PRIORITY INFORMATION: JP 1999-285761 19991006 20000322

JP 2000-80519

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Ashton, Rosemary LEGAL REPRESENTATIVE: Sughrue Mion, PLLC

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 2562

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 5 OF 8 USPATFULL on STN

ACCESSION NUMBER: 2003:197025 USPATFULL

TITLE: Positive-working photoresist composition INVENTOR (S):

Sato, Kenichiro, Shizuoka, JAPAN Kodama, Kunihiko, Shizuoka, JAPAN Aoai, Toshiaki, Shizuoka, JAPAN Kawabe, Yasumasa, Shizuoka, JAPAN

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Kanagawa, JAPAN (non-U.S.

corporation)

KIND DATE NUMBER US 6596458 B1 20030722 PATENT INFORMATION: B1 20030722 APPLICATION INFO.: US 2000-563436 20000503 (9)

NUMBER DATE PRIORITY INFORMATION: JP 1999-127296 19990507 JP 1999-186607 19990630 JP 1999-193601 19990707

JP 1999-193602 19990707 JP 1999-193603 19990707 DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Chu, John S. LEGAL REPRESENTATIVE: Sughrue Mion, PLLC

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 1613

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 6 OF 8 USPATFULL on STN

ACCESSION NUMBER: 2002:272716 USPATFULL

Polymer, resist composition and patterning process TITLE:

INVENTOR(S): Nishi, Tsunehiro, Nakakubiki-gun, JAPAN

Nakashima, Mutsuo, Nakakubiki-gun, JAPAN Tachibana, Seiichiro, Nakakubiki-gun, JAPAN Funatsu, Kenji, Nakakubiki-gun, JAPAN

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.

corporation)

NUMBER KIND DATE -----20021017 20020213 (10) PATENT INFORMATION: US 2002150835 A1 APPLICATION INFO.: US 2002-73223 A1

NUMBER DATE PRIORITY INFORMATION: JP 2001-37247 20010214 JP 2001-37262 20010214 JP 2001-37271 20010214

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON

BLVD., SUITE 1400, ARLINGTON, VA, 22201

NUMBER OF CLAIMS: 4 EXEMPLARY CLAIM: LINE COUNT: 1682

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 7 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2001:143826 CAPLUS

DOCUMENT NUMBER: 134:200525

TITLE: Positive-working photoresist composition for far

ultraviolet ray exposure Aogo, Toshiaki; Sato, Kenichiro; Kodama, Kunihiko INVENTOR (S):

Fuji Photo Film Co., Ltd., Japan PATENT ASSIGNEE(S):

SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE --------------JP 2001056557 A2 20010227 JP 1999-234240 19990820 PRIORITY APPLN. INFO.: JP 1999-234240

ANSWER 8 OF 8 USPATFULL on STN

ACCESSION NUMBER: 2001:212076 USPATFULL

TITLE:

Chemically amplified positive resist composition

INVENTOR(S): Uetani, Yasunori, Osaka, Japan Yamada, Airi, Osaka, Japan Miya, Yoshiko, Muko-shi, Japan

Takata, Yoshiyuki, Osaka, Japan NUMBER KIND DATE ----------PATENT INFORMATION: A1 US 2001044070 20011122

B2 20030617 A1 20010403 (9) US 6579659 APPLICATION INFO.: US 2001-824227

NUMBER DATE

JP 2000-101868 PRIORITY INFORMATION: 20000404 JP 2000-133328 20000502 JP 2000-209505 20000711

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS

CHURCH, VA, 22040-0747

NUMBER OF CLAIMS: 5 EXEMPLARY CLAIM: 1 LINE COUNT: 894

CAS INDEXING IS AVAILABLE FOR THIS PATENT.